

CLAIMS

What is claimed is:

1 1. A method for attempting to access a first data entity in a file system, the
2 file system also including one or more additional data entities that are concurrently
3 accessible to at least one other computing entity, the file system including an owner
4 field for indicating if the first data entity is leased by a computing entity and a time field
5 for indicating whether a lease for the first data entity has expired, the method
6 comprising:
7 attempting to obtain a lease on the first data entity by performing the
8 following substeps:
9 reserving a data storage unit containing the owner field;
10 if the owner field indicates that the first data entity is not currently
11 leased, writing to the owner field to indicate an assumption of a lease and
12 writing to the time field to indicate when the lease expires;
13 if the owner field indicates that the first data entity has been leased,
14 and the time field indicates that the lease is active, writing to the owner
15 field in a queue to indicate an intention to lease and writing to the time
16 field to indicate when the lease expires; and
17 if the owner field indicates that the first data entity has been leased,
18 but the time field indicates that the lease has expired, writing to the owner
19 field to break the existing lease and to indicate an assumption of a new
20 lease and writing to the time field to indicate when the new lease expires;
21 and
22 if a lease is obtained, accessing the first data entity while the lease is in
23 effect.